

REMARKS

In the Office Action, claims 34, 35, 40, 41 and 63 were rejected under 35 U.S.C. §102(b) as being anticipated by Vinson (U.S. Pat. No. 2,526,099). Claims 34-56 and 61-63 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kovach et al. (U.S. Pat. No. 2,951,641) in view of Vinson. Claims 58 and 59 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kovach et al. in view of Vinson, further in view of the applicant's own admission of prior art. Claims 57-59 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kovach et al. in view of Vinson, further in view of Chamot et al. (U.S. Pat. No. 6,257,493).

By the present invention, a key feature is that of a second cold liquid entry port controlled by the flow control means (which is provided within the mixing chamber) which communicates with the output passage of the device downstream from where the temperature of the output flow of the chamber is sensed. Operation of this second cold liquid entry port is performed automatically as part of the control of the flow control means. In this respect, in the specific embodiments, the flow control means includes the movable and stationary distributing members controlled by a single lever of a single lever mixing valve.

By changing the position of the single lever which controls the relative position of the distributing members, the proportions of hot and cold liquids through the entry

ports are altered, as described at paragraphs [63] to [69] of the published application. The point of the arrangement of the present invention is that it automatically ensures that a safe temperature is maintained at the output, this being the case as the introduction of cold liquid through the second cold liquid entry port is directly controlled by the flow control means. As stated on page 2, paragraph [37], the solution that the present invention seeks to provide is to supply a means whereby the mixer can internally (and automatically) impose an upper limit on the temperature of any liquid emerging from it.

In the Vinson patent, it is clear from Figure 8 and the related description at column 8, lines 15 to 30, that the introduction of cold water at a point downstream of the temperature control valve 50 is controlled by a user operating a separate control knob 26. This is discussed as being so that the user taking a shower may introduce cold water, i.e. for their comfort. This is quite different from the cold water introduction arrangement of the present invention which is linked directly to the flow control means provided within the mixing chamber.

There is some set temperature adjustment possible with the Vinson patent by adjusting element 51, but this is intended for service personnel only as being internal to the regulator (see column 7, lines 66 to 74). There is certainly no disclosure or suggestion of distribution members as in the present invention.

The Vinson patent does discuss the issue of avoiding scalding at column 8, lines 31 to 54, but this is achieved by a flow interruption means, again very different from the present invention.

As such, the present invention is both new and non-obvious over the Vinson patent, since whilst the Vinson patent shows a secondary cold liquid channel, this is controlled by the user with a separate control, and not automatically by flow control means located within the mixing chamber.

The Examiner has identified the elements 48, 49, 50, 62 in relation to the flow control means. However, none of the components of the control 26 which in fact controls the passage of cold water through the secondary cold water channel of the Vinson patent are within the mixing chamber.

With regard to the Kovach patent, the Examiner relies on the Vinson patent to disclose a secondary cold liquid channel which communicates with the output passage of the device downstream from where the temperature of the output flow of the channel is sensed. Given the comments above on the lack of relevance of the Vinson patent, combining the Vinson and Kovach patents is flawed.

Based on the foregoing amendments and remarks, it is respectfully submitted that the present application should now be in condition for allowance. A Notice of

Allowance is in order, and such favorable action and reconsideration are respectfully requested.

However, if after reviewing the above amendments and remarks, the Examiner has any questions or comments, she is cordially invited to contact the undersigned attorneys.

Respectfully submitted,

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